SEQUENCE LISTING

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Seq ID 6
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Seq ID 9
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Seq ID 10
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Seq ID 12
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Seq ID 13

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Seq ID 15
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Seq ID 16

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Seq ID 22
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Seq ID 23
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Seq ID 24
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aactctacac ctaagttagg ccctgcgttt aaagaagctt tcgagctttt actgcgtcgt    600
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Seq ID 25
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gcagaacttg ctgcctattt atatggttat gtcctgcggc aaaatccacg tgatccccat    180
tggattaata gggatcggtt tgtcttgtca gcaggtcatg gatctgytct tctctattct    240
tgtttgcatc ttgccggatt tgatgtttcc ttagaggatc ttcaggaatt cgccagctt    300
cactcccgaa ctcccgggca tcccgagtac ggcgaaactg tgggagtcga agcaacgaca    360
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Seq ID 26
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agctctacaa aaccaaagaa aggaattcca gtgactacat gtctgcттat ccatgagcag    300
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тacggagccc cctcgataca gcaaaaactg тccттaccta gtgacggtaa ctctgcctct    660
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Seq ID 27
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gcgcaaagta caggaaaaaa agaagctaca тcттcaacta ctaaaagтag таagggagaa    240
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Seq ID 28
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Seq ID 29
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tttaaggagg aaattttagg atcccgactg atcaacagtt tttttttaga aaaaacagac    360
gtcatggaga ccattctttg tcttctgaat cagcgctgtc ccaactcccc ttactaccac    420
ttatttaagg ctctagtatg ctataagcaa aagctatacc gtgaggtcat agagcaacta    480
gcctactggc aagaagagaa aactcgagcg cttgctcctt tattgaatat aagtattgaa    540
cagctgctaa cagattttct gttagattat atttctcgcg cattctctgat agaacagaaa    600
atgttccccg aaggcagagt aattcttaat cgcaatatca ataggttatt aaaacacgaa    660
tgtgagtgga atgcgaagac atacgatcgt attgcgattc ttcttagccg gagttatttt    720
ctagagttgg tagaatctaa gtctgcagat atttattttg attattatga gatggtgctt    780
ttctatctca aaaagatcta tatttttagag cagtgtcctt atgcagaact tctccccgag    840
```

```
gaagagcttg tttccttgat tatggaacac gtgtttatcc ttcctaaaga taaattatat    900
cctttaattc agctcctaga gatgtggcag aagcattatg ttcacccaaa tagttctttta    960
gtagttcaga tattggtaga ccgcttttct acacatatgg aaggggctat tcggtttttgt   1020
gaggctttag tttctttctc tggattggaa gaattacatc agcaaattat taccactttt   1080
gaagagctgc tttcaaataa agtacagcag ataaaaactg aagaggctaa acaatgtgtt   1140
gccctacttc atattttgga tccttctatt tccattagtg aaaaattagc tctttcttcg   1200
gatacattac aaaatatagt ttctggggac gacgagcagc atacaaaact ccgcaattac   1260
ctagatcttt gggaagccat acagtcttat gatattgatc gccaacagct cgttcatcac   1320
ttagtttatg gtgcaaaaga tctttggaaa aaaggaggaa atgatgaaaa ggcattgaac   1380
cttcttcagc tggtcttgag gtttacaagc tacgatatag aatgcgaaag tgttgtgttt   1440
ctttttataa aacaggcgta taagcaagca ctgtcttccc atgccattgc tcgtctttta   1500
aagttagaaa aatttatatc ggaagcgaat attccctcta tagtgattag tgaggctgag   1560
aaggccaatt tcttagcaga tgctgaatat cttttttgctc atgaagacta tgacaaatgc   1620
tatttgtata gcatgtggtt gactaaggtg gcccctccc ctcaatccta tcgcttagca   1680
gggttatgcc tgatggaaaa taagcgttac gacgaagctt tagaatttct ctgtatgctc   1740
tcacccaata atagtatcaa cgactataag acgcagaagg cattagcatt ttgccaaaaa   1800
catcaatcta aggaccgagc tgcctcttag                                     1830
```

Seq ID 30
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atgttgggca agaagaaga gtttacgtgt aaacaaaagc agtgtttgtc acattttgtt     60
accaatctga cgtccgatgt atttgcttta aaaaatcttc cagaagtcgt taagggagct    120
ttattttcta aatactcccg ttcagtttta ggtttgcgag cacttttgtt aaaagaattt    180
ctatctaatg aagaggatgg agatgtttgt gacgaagcct atgacttcga aaccgatgta    240
cagaaagctg cggacttta ccaaagggtt cttgataatt ttgggggatga ttctgtagga    300
gagcttggcg gagcccacct ggctatggaa aatgtctcta ttttggctgc taaagtttta    360
gaggatgctc gaattggcgg atccccgcta gaaaagtcca caagatacgt ctatttcgat    420
caaaaggtac ggggggagta tttatattac cgagacccta ttttgatgac ttcggccttt    480
aaagacatgt ttttgggtac ttgtgatttt ttattcgata cctattctgc tttaatccct    540
caagttcgtg cctattttga aaaactgtat cctaaagatt ctaaaacacc cgcatctgcc    600
tatgccacat cattacgagc taaagtttta gattgtatac ggggacttct tcctgcggca    660
actttgacaa atctaggatt tttcggtaac ggtaggtttt ggcaaaatct gattcacaag    720
ttacaaggtc ataaccttgc agagttgcga cgtttaggag atgaatccct aacagagctt    780
atgaaagtta ttccttcatt tgtaagtaga gccgagcctc atcatcacca tcatcaagct    840
atgatgcaat atcgaagagc tttaaaagag cagctcaagg gacttgctga acaagcaaca    900
tttagtgagg agatgtcttc ttcaccgagt gttcagttgg tatacggaga ccctgatggc    960
atttataaag tagctgctgg atttcttttt ccttattcaa atcgttctct tacagatctc   1020
atagactatt gtaaaaaaat gcctcatgaa gatcttgtac agattttaga gagcagtgtt   1080
tctgcaagag aaaaccgccg gcataagtct cctcgtggtt tagaatgcgt agaatttggc   1140
tttgatatac ttgctgattt cggtgcatac cgcgatttgc aacgacatcg gacgctgact   1200
caagaacgac agttactctc tacacatcat ggatacaatt ttcctgtgga gcttctagat   1260
actcctatgg aaaaatctta tcgagaagct atggagaggg cgaatgaaac ctataatgag   1320
attgttcagg agttccctga ggaagctcag tatatggttc ccatggctta caatatacgt   1380
tggttttcc atgtaaatgc tcgggctttg caatggattt gtgagttacg ctcacagcct   1440
caaggtcatc aaaattaccg cactatagct acaggtttag tgcgagaggt tgtcaagttc   1500
aatcctatgt acgaattatt tttcaaattt gtagattatt ctgacataga tttaggacgg   1560
ttaaatcagg aaatgcgaaa agaaccaacg acctaa                              1596
```

Seq ID 31
```
cgcgtgatga aggcagtggt ctctcacaag agcaggacct cctctataca caggcagtac     60
agctcttatt ctttatttta cagcatcctc aag                                   93
```

Seq ID 32
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gacggagtta attttggaaa tcttttccag ccgtgccctt actgcagagg caaatatcca     60
agtccaactt gcacaagcac gttatctcct tcctcgtct                            99
```

Seq ID 33
```
ggcttacgac ggttttgcaa acgatactcc atagtagtat cggaaagtgg agagcctttc     60
tgcttactca agaaaaaaaa gatctttttg                                       90
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Seq ID 34
```
aacttcccaa tctgtgatag aagttccaga ttcagagggg attgcagaga cgaggatctc     60
tgcggaagaa atcgatacga ggctttccct gacgacaaga cagaaggtca tctttgctct    120
tgcgacactc ttgctcttag caagtattgc tgccttcata gtcacgggat ttggtggatt    180
gacagtcatg caagttctcc ttgttgcttc tgtaggatcg gcggttgctt ctgtaacact    240
```

```
ccctatggtt tcctcaggat tttcctacgt cgcctaccaa ctgaaagcaa gattgaatat    300
cag                                                                  303
```

Seq ID 35
```
tttcttcctg tgttgccggg attattacta ggtcctcctt tacctcagat gtcgttcaga    60
ttg                                                                  63
```

Seq ID 36
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tttttcataa aatattctct ttcaaacgga tatgggattc aaaaatatct gcaaacaagg    60
ctctcagcta tacctgaatg gcatttttcc ggaacgaata ctagctcgaa aattaaaaaa    120
ctgtgcgaag agctatccca gaactgctct taccatagaa gtactggtat cctcggtctt    180
aggagctct                                                            189
```

Seq ID 37
```
tgcagctact ctgtttactc actatggagc ctcctacaac ttttgatgct gatgaaatca    60
gaaaagaaaa aatcaaaatt cttcaacgta tctcaccatt ttcagaaggt tcttcgattg    120
tccgaggaca atatggtcca ggaacggttc aaggagtctc ggtccttggc tatcgtgaag    180
aagagaatgt tgacaaagat tcccgag                                        207
```

Seq ID 38
```
gcacaagcgt tcgggagcct actcctcagg atgcta                              36
```

Seq ID 39
```
gagctactca tttcctacca gagaaaaaca agctcagcta ttggaaaaaa gaactttacg    60
accagctcgc agtgt                                                     75
```

Seq ID 40
```
gaaggaagag aagatcttcc atcagcactt aggaaaggca gccccacaag cggcaacagc    60
aacttcagga gtgcagccta ctgcggatcc tgttgc                              96
```

Seq ID 41
```
cgccttagga gtacaacaaa cacctcccag tcaagtcctc aatgggattg cactcatcct    60
atctatttat gtgatgttcc ccacgggagt ggctatgta                          99
```

Seq ID 42
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gctccccaag cccgggggtga caccaagatc agaggttatc gaaatcggac tcgcgcttgc    60
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Seq ID 43
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ggacgcttac tgaaacagtg tatgctatca agcttgcgca aatggctggc tatactacaa    60
ttatttctca tcgctcagga gaaactacgg acactacgat tgcagatctt gctgttgcct    120
tcaacgctgg tcaaatcaaa acaggctctt tatcacgttc tgagcgtgtt gcaaaataca    180
atagactcat ggaaattgaa gaagagcttg gatccgaagc aattttcaca gattctaatg    240
tattttctta cgaggattct gaggaataga gggattttct ctatttctat cttatctcca    300
aatcaagaat acatcgcaga tctatgggcc ttatctttc                          339
```

Seq ID 44
```
agcacaaatc caacagttgc tctcgcatca atatttgatg caaaaactac aaaatgtcca    60
```

Seq ID 45
```
accgacatac tcgtcaaatt cattaagaac atcttcccac ccctgtggag aggtaatgtc    60
gtaccccgca gcaaaaatat gacaagtatc tacacacacg ccaatgggaa tttgattttt    120
caaattctga acgaggtaac ccaattcttc aaagttactc ccaat                   165
```

Seq ID 46
```
tcttctcgct gtacacaacg agaaattgct gggaggagaa cggtaaacac accaaagcca    60
aagagatgta tggggagc                                                  78
```

Seq ID 47
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attgatgcca cccagatcaa ccttaatgcc tcccaagttg acattcacat taggaaccac    60
agtagctcct actggagtgc caggacctgt atgagacgtc gagtgagccc ctccacctgg    120
agtttcattt ataaaggaga agtctggagc tggggtcgtt ttccagttaa tgcctttcaa    180
gcccccaaca tcatcccaaa tcggacctgt ttctactttt gctccacgac gccatgcaga    240
gggtgtatat ccactactag attctttagc attccaagga ccgtagacta cagcagtttt    300
aaatttcatg ctgagcatca gatgattgta atttcctgtg gctcccgagc gctcttccat    360
```

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tgtaggtttt acgcgtcccg tcca                                        384
```

Seq ID 48
```
gcccttttat cacgagcttg tgtggcatca atcataccag ctcgtaagtc cgcatcaatc    60
gccatctgtt tacctggcat cgcatccaat cggaatcggg cagcaacttc ggcaacacgc   120
tcggcaccct tagttactac gataaac                                      147
```

Seq ID 49
```
aataaggtaa ttacaggatc atggcgagtg ggagcttgtg agagcatgga aaccagaaag    60
ccacctaaat gcttgaaaaa aaaggtcgat agggagaaag ccgtaaacat agagacgata   120
aaggtaaccg cagaaggaaa atcc                                         144
```

Seq ID 50
```
ggcatctctg tgatgatgat gctctcacga tgtttatctt cattctcttc tacatgcaga    60
cgagctcgaa ctttaatctt tcctcgtcct gtagtatacg tggagcgaat tccttcagaa   120.
ccgcagataa ttcctcctgt agggaaatca gggcctggca tgacttgtaa aatctcatcc   180
acagaagcct gtggatttgc aagcagaaga agtgtagctt ctataagttc ccctaaattg   240
tgtggggggga tattcgttgc catcccaaca gcaattcctg aagaaccatt gcaaagaaga   300
ttcggaaatt tagaaggaaa aactacaggc tcgtgttttg tttcatca                348
```

Seq ID 51
```
agtggcagaa ttatctccgt catgttgtcc gctccaccgt gtgagctgca tagtgacttg    60
atagatcccg acttgtttga gtttaaccac aggctcaata tctgcatatc tgctgaagtc   120
aggggtcgcg ttacgactca cacttttaga ggtgatagct gcaacatgag tttcaattgt   180
agtgttaggg gcaacgtaat aaccattccc aggataatac gtatagagat tcgcagcctg   240
acatccagtt tttctataat aactaaatgt aagcgcatct cgagcagact gaggatcact   300
aatattattg catactggag tttgcgatac gtctgtctta gaatagatat taaaacgtc    360
agagagtgta gtagcattaa gttgagaacc ttccgcagac acattaccct tcacaataaa   420
ttcacatgga gaagtcgtgg tatc                                         444
```

Seq ID 52
```
agtgatcgta actctttttc aatctctgtg agtttttcaa aatacgcaga ttttatagca    60
cctctgaact ggagcttacg caccagaagg gcgttcaacc cagtagaagc cgccctcatt   120
cgattttcac attcttcaag agttaggcca gaagttactg ttccagaaat aaggaactca   180
```

Seq ID 53
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atgccttgga ttttctataa acttttcaat ataaacattg gggttattaa aaccggcttc    60
ggcttctgca cgtgcggcag aaaacgctct atagaattcg tccttttctt taacaatacg   120
aattcctctt cccccacctc cagcaacggc tttaataaca ataggggaaac ctattttttc   180
agctatttt                                                          189
```

Seq ID 54
```
atttccatgt cttccataga aacccttct tcaccgacaa cttccatacg cttgccgatt    60
tctgaacctt tctctagaaa ctgtgctgct ttttcacag caccacccca gcctgaaacc   120
ttctcttcta aaatttgtcc tacctggttc aaatatttg accaagaaat caaagggtct   180
attgaaggat acctacgtgc gtcagctcgt gcttttgaaa gaccacagaa cgctccgact   240.
acagctaatg tagat                                                   255
```

Seq ID 55
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ggagaccttg aacattataa acacatccat ggaccttttt caaaatcaag ccaccatggc    60
aaacgtcata agcgccacaa ttatttaatg ttcctacagt gtcgatataa gactctatgc   120
ggtgatcagg aatca                                                   135
```

Seq ID 56
```
agggtatctt tcaatgcatc cccgccgatc acaacaagtc gtagggactc caaacaggaa    60
ttttgttttt ttgctgtttt cagaata                                      87
```

Seq ID 57
```
tcaataaacc cactagcacc acagcgttca ttaggccctg ccatacaata ccagctagaa    60
gaatggccga tacaggacac ttcgatttca cgagaccta agcgactttc ctccacaaac   120
acatccgtgt catatagaaa tgcttctgag atcttttctt gtaattcctc tttatcacgg   180
actaaaaata tcccaatact agatcccaaa tgtgcagttt ttacaatcat agggaaagaa   240
aatgtctcta taagattc                                                258
```

Seq ID 58

```
ccactaggtc ccgcaccaat aacaacacaa tcaaattctt gggtcatatt ctcactcact      60
gtaatcaaga tttcaaaaag aacccccctt cataaatgca tgcatctcat taagaagagg     120
accctgtgct tattt                                                      135
```

Seq ID 59

```
ggagaacaac cattcctgtt tcatcccact tcacagcaaa gtttgtctct gtatcatcac      60
tatataggca ccctacaatc gtctttccat cactggaaac accctctgca aaagattgca     120
ttccctcaga aaatattcca agatcaacaa gtgcaccgtt tacccacttc acagcgcggc     180
aagacggatc ttgatccgag attccta                                         207
```

Seq ID 60

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gtgacatcta agtacgttc catgcgtcca tcaattccta atccagcttc acatacacgt       60
aaaatagcac gcgctcctac atctcggctg acaagattcc catacgcagg atacatatct     120
tctaagaaat accaaggagc tcctgtctct ccacaaggac gttccgaacc atctggaaat     180
actatgcgct ttgaagaatc cccaggcacc cacacgac cgccctcacc acgcacagac       240
tctgaaatta atcgtagctt atcccttcca ggaattgctg taggg                     285
```

Seq ID 61

MVNPIGPGPIDETERTPPADLSAQGLEASAANKSAEAQRIAGAEAKPKESKTDSVERWSILRSAVNALMSLADKLGIASS
NSSSSTSRSADVDSTTATAPTPPPPTFDDYKTQAQTAYDTIFTSTSLADIQAALVSLQDAVTNIKDTAATDEETAIAAEW
ETKNADAVKVGAQITELAKYASDNQAILDSLGKLTSFDLLQAALLQSVANNNKAAELLKEMQDNPVVPGKTPAIAQSLVD
QTDATATQIEKDGNAIRDAYFAGQNASGAVENAKSNNSISNIDSAKAAIATAKTQIAEAQKKPPDSPILQEAEQMVIQAE
KDLKNIKPADGSDVPNPGTTVGGSKQQGSSIGSIRVSMLLDDAENETASILMSGFRQMIHMFNTENPDSQAAQQELAAQA
RAAKAAGDDSAAAALADAQKALEAALGKAGQQQGILNALGQIASAAVVSAGVPPAAASSIGSSVKQLYKTSKSTGSDYKT
QISAGYDAYKSINDAYGRARNDATRDVINNVSTPALTRSVPRARTEARGPEKTDQALARVISGNSRTLGDVYSQVSALQS
VMQIIQSNPQANNEEIRQKLTSAVTKPPQFGYPYVQLSNDSTQKFIAKLESLFAEGSRTAAEIKALSFETNSLFIQQVLV
NIGSLYSGYLQ

Seq ID 62

MKKLLKSALLSAAFAGSVGSLQALPVGNPSDPSLLIDGTIWEGAAGDPCDPCATWCDAISLRAGFYGDYVFDRILKVDAP
KTFSMGAKPTGSAAANYTTAVDRPNPAYNKHLHDAEWFTNAGFIALNIWDRFDVFCTLGASNGYIRGNSTAFNLVGLFGV
KGTTVNANELPNVSLSNGVVELYTDTSFSWSVGARGALWECGCATLGAEFQYAQSKPKVEELNVICNVSQFSVNKPKGYK
GVAFPLPTDAGVATATGTKSATINYHEWQVGASLSYRLNSLVPYIGVQWSRATFDADNIRIAQPKLPTAVLNLTAWNPSL
LGNATALSTTDSFSDFMQIVSCQINKFKSRKACGVTVGATLVDADKWSLTAEARLINERAAHVSGQFRF

Seq ID 63

MSVNPSGNSKNDLWITGAHDQHPDVKESGVTSANLGSHRVTASGGRQGLLARIKEAVTGFFSRMSFFRSGAPRGSQQPSA
PSADTVRSPLPGGDARATEGAGRNLIKKGYQPGMKVTIPQVPGGGAQRSSGSTTLKPTRPAPPPPKTGGTNAKRPATHGK
GPAPQPPKTGGTNAKRAATHGKGPAPQPPKGILKQPGQSGTSGKKRVSWSDED

Seq ID 64

MGINPSGNRSPDDVWVRGAQGDSSSTQGTGATNSNLGAHNVTTSTSQPQVASKAKQLWQTVREFFLGKKSPDSSQGASGP
AMQSPSGPTIRPTRPAPPPPTTGGANAKRPATHGKGRAPQPPTAGSSSGSEQPTAMSSEVAKLVSELKDAVHSHAESQKV
LKKVSQELQTKWTDWENNRGPDYLLHGYRVIARALQQTYTEQSMLIEGTSSTGPVPQAVTVAKDAVTQTVRGAIKNLENP
KPGNDPDGVLMQVVISLGIEGPTLDPGESIQNFLETRVSDFGGDDSDIDYTSDIARLGSALDRVRENHPNEMPRIWIALA
RELGAAVHSHATSVRIANAGKNHTRDVVRMANESSRLLQGMKVLSVGAWANTMTVLIGDLFE

Seq ID 65

MKTLWHFVSKAFLSIVGLCCGVVLAFVVIFPALIASSLGNGDATFVSLPDAQGEVKDLGKTAPIIAVIEMKDVIASSKNTA
KTIQNILEGFEKAPLKDRVKGIVIDMDCPGGEVFEIDRIYSMLRFWKERKGFPIYIYVNGLCASGGYYVSCAATKIYATS
SSLIGSIGVRSGPFFNVKEGLNRYGVESDLLTAGKDKAPMNPYTPWTSHDREERQATLDFLYGQFVDIVTQNRPLLTKEK
LVHTLGARIFSPEKAKQEGYIDVVGATKEQVLQDIVAVCKIEDNYRVIGSGGDGWWKRVASAAASSPLVTGMIKHDILPL
SHDAAYIPPYLAL

Seq ID 66

MRPHRKHVSSKSLALKQSASTHVEITTKAFRLSMPLKQLILEKSDHLPPMETIRVVLTSHKDKLGTEVHVVASHGKEILQ
TKVHNANPYTAVINAFKKIRTMANKHSNKRKDRTKHDLGLAAKEERIAIQEEQEDRLSNEWLPVEGLDAWDSLKTLGYVP
ASAKKKISKKKMSIRMLSQDEAIRQLESAAENFLIFLNEQEHKIQCIYKKHDGNYVLIEPSLKPGFCI

Seq ID 67

MAAPINQPSTTTQITQTGQTTTTTTVGSLGEHSVTTTGSGAAAQTSQTVTLIADHEMQEIASQDGSAVSFSAEHSFSTLP
PETGSVGATAQSAQSAGLFSLSGRTQRRDSEISSSSDGSSISRTSSNASSGETSRAESSPDLGDLDSLSGSERAEGAEGP
EGPGGLPESTIPHYDPTDKASILNFLKNPAVQQKMQTKGGHFVYVDEARSSFIFVRNGDWSTAESIKVSNAKTKENITKP

ADLEMCIAKFCVGYETIHSDWTGRVKPTMEERSGATGNYNHLMLSMKFKTAVVYGPWNAKESSSGYTPSAWRRGAKVETG
PIWDDVGGLKGINWKTTPAPDFSFINETPGGGAHSTSHTGPGTPVGATVVPNVNVNLGGIKVDLGGINLGGITTNVTTEE
GGGTNITSTKSTSTDDKVSITSTGSQSTIEEDTIQFDDPGQGEDDNAIPGTNTPPPPGPPPNLSSSRLLTISNASLNQVL
QNVRQHLNTAYDSNGNSVSDLNQDLGQVVKNSENGVNFPTVILPKTTGDTDPSGQATGGVTEGGGHIRNIIQRNTQSTGQ
SEGATPTPQPTIAKIVTSLRKANVSSSSVLPQPQVATTITPQARTASTSTTSIGTGTESTSTTSTGTGTGSVSTQSTGVG
TPTTTTRSTGTSATTTTSSASTQTPQAPLPSGTRHVATISLVRNAAGRSIVLQQGGRSQSFPIPPSGTGTQNMGAQLWAA
ASQVASTLGQVVNQAATAGSQPSSRRSSPTSPRRK

Seq ID 68
MKTSQLFYKTSKNANKSAAVLSNELLEKAGYLFKVSKGVYTYTPLLWRVVSKMMNIIREELNAIGGQELLLPLLHNAELW
QHTGRWEAFTSEGLLYTLKDREGKSHCLAPTHREVICSFVAQWLSSKRQLPLHLYQIATKFRDEIRPRFGLIRSRELLME
DSYTFSDSPEQMNEQYEKLRSAYSKIFDRLGLAYVIVTADGGKIGKGKSEEFQVLCSLGEDTICVSGSYGANIEAAVSIP
PQHAYDREFLPVEEVATPGITTIEALANFFSIPLHKILKTLVVKLSYSNEEKFIAIGMRGDRQVNLVKVASKLNADDIAL
ASDEEIERVLGTEKGFIGPLNCPIDFFADETTSPMTNFVCAGNAKDKHYVNVNWDRDLLPPQYGDFLLAEEGDTCPENPG
HPYRIYQGIEVAHIFNLGTRYTDSFEVNFQDEHGQTQQCWMGTYGIGVGRTLAACVEQLADDRGIVWPKALAPFSITIAF
NGGDTVSQELAETIYHELQSQGYEPLLDDRDERLGFKLKDSDLIGIPYKLILGKSYQSSGIFEIESRSGEKYTVSPEAFP
TWCQNHLA

Seq ID 69
MASGIGGSSGLGKIPPKDNGDRSRSPSPKGELGSHEISLPPQEHGEEGASGSSHIHSSSSFLPEDQESQSSSSAASSPGF
FSRVRSGVDRALKSFGNFFSAESTSQARETRQAFVRLSKTITADERRDVDSSSAAATEARVAEDASVSGENPSQGVPETS
SGPEPQRLFSLPSVKKQSGLGRLVQTVRDRIVLPSGAPPTDSEPLSLYELNLRLSSLRQELSDIQSNDQLTPEEKAEATV
TIQQLIQITEFQCGYMEATQSSVSLAEARFKGVETSDEINSLCSELTDPELQELMSDGDSLQNLLDETADDLEAALSHAR
LSFSLDDNPTPIDNNPTLISQEEPIYEEIGGAADPQRTRENWSTRLWNQIREALVSLLGMILSILGSILHRLRIARHAAA
EAVGRCCTCRGEECTSSEEDSMSVGSPSEIDETERTGSPHDVPRRNGSPREDSPLMNALVGWAHKHGAKTKESSESSTPE
ISISAPIVRGWSQDSSVSFIVMEDDHIFYDVPRRKDGIYDVPSSPRWSPARELEEDVFGDYEVPITSAEPSKDKNIYMTP
RLATPAIYDLPSRPGSSGSSRSPSSDRVRSSSPNRRGVPLPPVPSPAMSEEGSIYEDMSGASGAGESDYEDMSRSPSPRG
DLDEPIYANTPEDNPFTQRNIDRILQERSGGASASPVEPIYDEIPWIHGRPPATLPRPENTLTNVSLRVSPGFGPEVRAA
LLSESVSAVMVEAESIVPPTEPGDGESEYLEPLGGLVATTKILLQKGWPRGESNA

Seq ID 70
MRFPCFGMLLPFTFVLANEGLQLPLETYITLSPEYQAAPQVGFTHNQNQDLAIVGNHNDFILDYKYYRSNGGALTCKNLL
ISENIGNVFFEKNVCPNSGGAIYAAQNCTISKNQNYAFTTNLVSDNPTATAGSLLGGALFAINCSITNNLGQGTFVDNLA
LNKGGALYTETNLSIKDNKGPIIIKQNRALNSDSLGGGIYSGNSLNIEGNSGAIQITSNSSGSGGGIFSTQTLTISSNKK
LIEISENSAFANNYGSNFNPGGGGLTTTFCTILNNREGVLFNNNQSQSNGGAIHAKSIIIKENGPVYFLNNTATRGGALL
NLSAGSGNGSFILSADNGDIIFNNNTASKHALNPPYRNAIHSTPNMNLQIGARPGYRVLFYDPIEHELPSSFPILFNFET
GHTGTVLFSGEHVHQNFTDEMNFFSYLRNTSELRQGVLAVEDGAGLACYKFFQRGGTLLLGQGAVITTAGTIPTPSSTPT
TVGSTITLNHIAIDLPSILSFQAQAPKIWIYPTKTGSTYTEDSNPTITISGTLTLRNSNNEDPYDSLDLSHSLEKVPLLY
IVDVAAQKINSSQLDLSTLNSGEHYGYQGIWSTYWVETTTITNPTSLLGANTKHKLLYANWSPLGYRPHPERRGEFITNA
LWQSAYTALAGLHSLSSWDEEKGHAASLQGIGLLVHQKDKNGFKGFRSHMTGYSATTEATSSQSPNFSLGFAQFFSKAKE
HESQNSTSSHHYFSGMCIENTLFKEWIRLSVSLAYMFTSEHHTMTYQGLLEGNSQGSFHNHTLAGALSCVFLPQPHGESL
QIYPFITALAIRGNLAAFQESGDHAREFSLHRPLTDVSLPVGIRASWKNHHRVPLVWLTEISYRSTLYRQDPELHSKLLI
SQGTWTTQATPVTYNALGIKVKNTMQVFPKVTLSLDYSADISSSTLSHYLNVASRMRF

Seq ID 71
MKSSLHWFLISSSLALPLSLNFSAFAAVVEINLGPTNSFSGPGTYTPPAQTTNADGTIYNLTGDVSITNAGSPTALTASC
FKETTGNLSFQGHGYQFLLQNIDAGANCTFTNTAANKLLSFSGFSYLSLIQTTNATTGTGAIKSTGACSIQSNYSCYFGQ
NFSNDNGGALQGSSISLSLSLNPNLTFAKNKATQKGGALYSTGGITINNTLNSASFSENTAANNGGAIYTEASSFISSNKAI
SFINNSVTATSATGGAIYCSSTSAPKPVLTLSDNGELNFIGNTAITSGGAIYDNLVLSSGGPTLFKNNSAIDTAAPLGG
AIAIADSGSLSLSALGGDITFEGNTVVKGASSSQTTTRNSINIGNTNAKIVQLRASQGNTIYFYDPITTSITAALSDALN
LNGPDLAGNPAYQGTIVFSGEKLSEAEAAEADNLKSTIQQPLTLAGGQLSLKSGVTLVAKSFSQSPGSTLLMDAGTTLET
ADGITINNLVLNVDSLKETKKATLKATQASQTVTLSGSLSLVDPSGNVYEDVSWNNPQVFSCLTLTADDPANIHITDLAA
DPLEKNPIHWGYQGNWALSWQEDTATKSKAATLTWTKTGYNPNPERRGTLVANTLWGSFVDVRSIQQLVATKVRQSQETR
GIWCEGISNFFHKDSTKINKGFRHISAGYVVGATTTLASDNLITAAFCQLFGKDRDHFINKNRASAYAASLHLQHLATLS
SPSLLRYLPGSESEQPVLFDAQISYIYSKNTMKTYYTQAPKGESSWYNDGCALELASSLPHTALSHEGLFHAYFPFIKVE
ASYIHQDSFKERNTTLVRSFDSGDLINVSVPIGITFERFSRNERASYEATVIYVADVYRKNPDCTTALLINNTSWKTTGT
NLSRQAGIGRAGIFYAFSPNLEVTSNLSMEIRGSSRSYNADLGGKFQF

Seq ID 72
MFEKFTNRAKQVIKLAKKEAQRLNHNYLGTEHILLGLLKLGQGVAVNVLRNLGIDFDTARQEVERLIGYGPEIQVYGDPA
LTGRVKKSFESANEEASLLEHNYVGTEHLLLGILHQSDSVALQVLENLHIDPREVRKEILKELETFNLQLPPSSSSSSSS
SRSNPSSSKSPLGHSLGSDKNEKLSALKAYGYDLTEMVRESKLDPVIGRSSEVERLILILCRRRKNNPVLIGEAGVGKTA
IVEGLAQKIIILNEVPDALRKKRLITLDLALMIAGTKYRGQFEERIKAVMDEVRKHGNILLFIDELHTIVGAGAAEGAIDA
SNILKPALARGEIQCIGATTIDEYRKHIEKDAALERRFQKIVVHPPSVDETIEILRGLKKKYEEHHNVFITEEALKAAAT

LSDQYVHGRFLPDKAIDLLDEAGARVRVNTMGQPTDLMKLEAEIENTKLAKEQAIGTQEYEKAAGLRDEEKKLRERLQSM
KQEWENHKEBHQVPVDEEAVAQVVSLQTGIPSARLTEAESEKLLKLEDTLRRKVIGQNDAVTSICRAIRRSRTGIKDPNR
PTGSFLFLGPTGVGKSLLAQQIAIEMFGGEDALIQVDMSEYMEKFAATKMMGSPPGYVGHEEGGHLTEQVRRRPYCVVLF
DEIEKAHPDIMDLMLQILEQGRLTDSFGRKVDFRHAIIIMTSNLGADLIRKSGEIGFGLKSHMDYKVIQEKIEHAMKKHL
KPEFINRLDESVIFRPLEKESLSEIIHLEINKLDSRLKNYQMALNIPDSVISFLVTKGHSPEMGARPLRRVIEQYLEDPL
AELLLKESCRQEARKLRATLVENRVAFEREEEEQEAALPSPHLES

Seq ID 73
MGLQSRLQHCIEVSQNSNFDSQVKQFIYACQDKTLRQSVLKIFRYHPLLKIHDIARAVYLLMALEEGEDLGLSFLNVQQY
PSGAVELFSCGGFPWKGLPYPAEHAEFGLLLLQIAEFYEESQAYVSKMSHFQQALFDHQGSVFPSLWSQENSRLLKEKTT
LSQSFLFQLGMQIHPEYSLEDPALGFWMQRTRSSSAFVAASGCQSSLGAYSSGDVGVIAYGPCSGDISDCYYFGCCGIAK
EFVCQKSHQTTEISFLTSTGKPHPRNTGFSYLRDSYVHLPIRCKITISDKQYRVHAALAEATSAMTFSIFCKGKNCQVVD
GPRLRSCSLDSYKGPGNDIMILGENDAINIVSASPYMEIFALQGKEKFWNADFLINIPYKEEGVMLIFEKKVTSEKGRFF
TKMN

Seq ID 74
MTKIAFSEKAKNFPVEALKKWFEKNKRSLPWRDNPTPYSVWVSEVMLQQTRAEVVIDYFNQWMERFPTIESLAAAKEEDV
IKLWEGLGYYSRARHLLEGARMVMEEFHGKIPDDAISLAQIRGVGPYTVHAILAFAFKRRAAAVDGNVLRVLSRIFLIET
SIDLESTRTWVSRIAQALLPHKSPEVIAEALIELGACICKKVPQCHRCPVRQACGAWRENKQFVLPVRHARKKVIFLHRL
VAIVLYDGSLVVEKRRPKEMMAGLYEFPYIEVEPEEGLQDIEGFTKKMELSLESPLEFLGNLKEQRHAFTNHKVHLCPII
FKATSLPQFGELHLLSDIDHLAFSSGHKKIKDALLIYLGDVRSRESIGV

Seq ID 75
MAVSGGGGVQPSSDPGKWNPALQGEQAEGPSPLKESIFSETKQASSAAKQESLVRSGSTGMYATESQINKAKYRKAQDRS
STSPKSKLKGTFSKMRASVQGFMSGFGSRASRVSAKRASDSGEGTSLLPTEMDVALKKGNRISPEMQGFFLDASGMGGSS
SDISQLSLEALKSSAFSGARSLSLSSSESSSVASFGSFQKAIEPMSEEKVNAWTVARLGGEMVSSLLDPNVETSSLVRRA
MATGNEGMIDLSDLGQEEVSTAMTSPRAVEGKVKVSSSDSPEANPTGIPNSNTLERAEKEAEKQESREQLSEDQMMLARA
MAGLLTGAAPQEVLSNSVWSGPSTVFPPPKFSGTLPTQRSGDKSKHKSPGIEKSTNHTNFSPLREGTVKSAEVKSLPHPE
SMYRFPKDSIVSREEPEAVVKESTAFKNPENSSQNFLPIAVESVFPKESGTGGALGSDAVSSSYHFLAQRGVSLLAPLPR
ATDDYKEKLEAHKGPGGPPDPLIYQYRNVAVEPPIVLRSPQPFSGSSRLSVQGKPEAASVHDDGGGGNSGGFSGDQRRGS
SGQKASRQEKKGKKLSTDI

Seq ID 76
MKRRSWLKILGICLGSSIVLGFLIFLPQLLSTESGKYLVFSLIHKESGLSCSAEELKISWFGRQTARKIKLTGEAKDEVF
SAEKFELDGSLLRLLIYKKPKGITLSGWSLKINEPASIDHPSVSHLDPGSLLTYLNDCKIISEHGFITMKTVSGSSLSVS
GFYLEKSSEKFMTKCVVSEDQQSGNIFIESVLSPDVSISAQFSSVPVAFFKIFIASPFWDHLLSYEDIINLSAEATHTND
GKISMTASGEGNQIQMKLQGHIHKSTFYIVEGSSSFIELKPELASALCNQIIPLSTPITSKQIHATVSYAKIPLDITKWK
HIEITSQAQLPEVAIHPKDPNLALQLRDTKLGIKKTEKFSDIRYSSSTVLGGASPSHLNGLISIDNKKHLTKFRLQQAQL
PHTYLRAIFPQPFVINVPLDVAYYSLNIEGTYKNAHLEADAILDNPLLKLSCSMSGAWKNFLFKGQGTYHFNKKWQEILS
PHFSYAEARFSGKAQITDTNLFFPKFSGKITARENELLIHAKFGSPNEPIKPETTSILIHGQFCSLPLSLVSNHLAPFHL
KKLTFSFHTDGGKFVTKGNLQALIENPDYPDLNNTRILIPDLLLLSLDESSTSPSSKDLKIQGSGEIFSLPLDSITKTYGK
QVRLSPYFGSSGDLNFVVNYNPKDQNKLTLLSNFKSEALLGELKLVMDFSMKLSSGTQGTLQWEVSPERYASFFKNASCS
PTCLLHRTANVRLDISKLSCPEETKGLSCLTLLAAGGLEGSLEATPLIFYDNVSKETFIINDFKGSLRANNLDAKIEYDL
KGSCLAPRQDSKTLAEFSLEGQVDHLFSPESREFKQTANWIHIPSSFIAGIIPMSPGLKAQISSLAGPRINVSIKNAFRF
GEGPVDIMVDSENLQAQIPLILNEKSILLRENLTAHLSINEDVNKAFLQEFNPLLAGGAYSQYPVTLEIDKQNFYLPIRP
YSFEEFRIQSATLDMGKISIANTGTMYALFQFLDITDQKQFVESWFTPIFFSVQKGSIICKRXDALIDRRIRLALWGKTD
IAHDRLFMTLGIDPEVIKKYFHNTSLKTKNFFLIKIRGSISSPEVDWSSAYARIALLKSYSLGNPFSSLADKLFSSLGDS
TPPPTVHPFPWEKSNFDSIENK

Seq ID 77
MSSPVNNTPSAPNIPIPAPTTPGIPTTKPRSSFIEKVIIVAKYILFAIAATSGALGTILGLSGALTPGIGIALLVIFFVS
MVLLGLILKDSISGGEERRLREEVSRFTSENQRLTVITTTLETEVKDLKAAKDQLTLEIEAFRNENGNLKTTAEDLEEQV
SKLSEQLEALERINQLIQANAGDAQEISSELKKLISGWDSKVVEQINTSIQALKVLLGQEWVQEAQTHVKAMQEQIQALQ
AEILGMHNQSTALQKSVENLLVQDQALTRVVGELLESENKLSQACSALRQEIEKLAQHETSLQQRIDAMLAQEQNLAEQV
TALEKMKQEAQKAESEFIACVRDRTFGRRETPPPTTPVVEGDESQEEDEGGTPPVSQPSSPVDRATGDGQ

Seq ID 78
MRYDPNLIEKKWQQFWKEHRSFQANEDEDKVKYYVLDMFPYPSGAGLHVGHLIGYTATDIVARYKRARGFSVLHPMGWDS
FGLPAEQYAIRTGTHPKVTTQKNIANFKKQLSAMGFSYDEGREFATSDPDYYHWTQKLFLFLYDQGLAYMADMAVNYCPE
LGTVLSNEEVENGFSIEGGYPVERKMLRQWILKITAYADKLLEGLDALDWPENVKQLQKNWIGKSEGALVTFHLTQEGSL
EAFTTRLDTLLGVSFLVIAPEHPDLDSIVSEEQRDEVTAYVQESLRKSERDRISSVKTKTGVFTGNYAKHPITGNLLPVW
ISDYVVLGYGTGVVMGVPAHDERDREFAEMFSLPIHEVIDDNGVCIHSNYNDFCLNGLSGQEAKDYVINYLEMRSLGRAK
TMYRLRDWLFSRQRYWGEPIPIIHFEDGTHRPLEDDELPLLPPNIDDYRPEGFGQGPLAKAQDWVHIYDEKTGRPGCRET
YTMPQWAGSCWYYLRFCDAHNSQLPWSKEKESYWMPVDLYIGGAEHAVLHLLYSRFWHRVFYDAGLVSTPEPFKKLINQG

KDMFLGTCDFLFDTYSALIPQVRAYFEKLYPKDSKTPASAYATSLRAKVLDCIRGLLPAATLTNLGFFGNGRFWQNLIHK
LQGHNLAELRRLGDESLTELMKVIPSFVSRAEPHHHHHQAMMQYRRALKEQLKGLAEQATFSEEMSSSPSVQLVYGDPDG
IYKVAAGFLFPYSNRSLTDLIDYCKKMPHEDLVQILESSVSARENRRHKSPRGLECVEFGFDILADFGAYRDLQRHRTLT
QERQLLSTHHGYNFPVELLDTPMEKSYREAMERANETYNEIVQEFPEEAQYMVPMAYNIRWFFHVNARALQWICELRSQP
QGHQNYRTIATGLVREVVKFNPMYELFFKFVDYSDIDLGRLNQEMRKEPTT

Seq ID 91
RVMKAVVSHKSRTSSIHRQYSSYSLFYSILK

Seq ID 92
DGVNFGNLFQPCPYCRGKYPSPTCTSTLSPSSS

Seq ID 93
GLRRFCKRYSIVVSESGEPFCLLKKKKIFL

Seq ID 94
NFPICDRSSRFRGDCRDEDLCGRNRYEAFPDDKTEGHLCSCDTLALSKYCCLHSHGIWWIDSHASSPCCFCRIGGCFCNT
PYGFLRIFLRRLPTESKIEYQ

Seq ID 95
FLPVLPGLLLGPPLPQMSFRL

Seq ID 96
FFIKYSLSNGYGIQKYLQTRLSAIPEWHFSGTNTSSKIKKLCEELSQNCSYHRSTGILGLRSS

Seq ID 97
CSYSVYSLWSLLQLLMLMKSEKKKSKFFNVSHHFQKVLRLSEDNMVQERFKESRSLAIVKKRMLTKIPE

Seq ID 98
AQAFGSLLLRML

Seq ID 99
ELLISYQRKTSSAIGKKNFTTSSQC

Seq ID 100
EGREDLPSALRKGSPTSGNSNFRSAAYCGSCC

Seq ID 101
RLRSTTNTSQSSPQWDCTHPIYLCDVPHGSGYV

Seq ID 102
APQARGDTKIRGYRNRTRAC

Seq ID 103
GRLLKQCMLSSLRKWLAILQLFLIAQEKLRTLRLQILLLPSTLVKSKQALYHVLSVLQNTIDSWKLKKSLDPKQFSQILM
YFLTRILRNRGIFSISILSPNQEYIADLWALSF

Seq ID 104
STNPTVALASIFDAKTTKCP

Seq ID 105
TDILVKFIKNIFPPLWRGNVVPRSKNMTSIYTHANGNLIFQILNEVTQFFKVTPN

Seq ID 106
SSRCTQREIAGRRTVNTPKPKRCMGS

Seq ID 107
IDATQINLNASQVDIHIRNHSSSYWSARTCMRRRVSPSTWSFIYKGEVWSWGRFPVNAFQAPNIIPNRTCFYFCSTTPCR
GCISTTRFFSIPRTVDYSSFKFHAEHQMIVISCGSRALFHCRFYASRP

Seq ID 108
ALLSRACVASIIPARKSASIAICLPGIASNRNRAATSATRSAPLVTTIN

Seq ID 109
NKVITGSWRVGACESMETRKPPKCLKKKVDREKAVNIETIKVTAEGKS

Seq ID 110
GISVMMMLSRCLSSFSSTCRRARTLIFPRPVVYVERIPSEPQIIPPVGKSGPGMTCKISSTEACGFASRRSVASISSPKL
CGGIFVAIPTAIPEEPLQRRFGNLEGKTTGSCFVSS

Seq ID 111
SGRIISVMLSAPPCELHSDLIDPDLFEFNHRLNICISAEVRGRVTTHTFRGDSCNMSFNCSVRGNVITIPRIIRIEIRSL
TSSFSIITKCKRISSRLRITNIIAYWSLRYVCLRIDIKTVRECSSIKLRTFRRHITLHNKFTWRSRGI

Seq ID 112
SDRNSFSISVSFSKYADFIAPLNWSLRTRRAFNPVEAALIRFSHSSRVRPEVTVPEIRNS

Seq ID 113
MPWIFYKLFNINIGVIKTGFGFCTCGRKRSIEFVLFFNNTNSSSPTSSNGFNNNRETYFFSYF

Seq ID 114
ISMSSIETPSSPTTSIRLPISEPFSRNCAAFFTAPPQPETFSSKICPTWFKYFDQEIKGSIEGYLRASARAFERPQNAPT
TANVD

Seq ID 115
GDLEHYKHIHGPFSKSSHHGKRHKRHNYLMFLQCRYKTLCGDQES

Seq ID 116
RVSFNASPPITTSRRDSKQEFCFFAVFRI

Seq ID 117
SINPLAPQRSLGPAIQYQLEEWPIQDTSISRDPKRLSSTNTSVSYRNASEIFSCNSSLSRTKNIPILDPKCAVFTIIGKE
NVSIRF

Seq ID 118
PLGPAPITTQSNSWVIFSLTVIKISKRTPLHKCMHLIKKRTLCLF

Seq ID 119
GEQPFLFHPTSQQSLSLYHHYIGTLQSSFHHWKHPLQKIAFPQKIFQDQQVHRLPTSQRGKTDLDPRFL

Seq ID 120
VTSKYASMRPSIPNPASHTRKIARAPTSRLTRFPYAGYISSKKYQGAPVSPQGRSEPSGNTMRFEESPGTHTRPPSPRTD
SEINRSLSLPGIAVG